

2017-07-07

# Orienting digital radiographs

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<http://hdl.handle.net/10026.1/11199>

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10.1038/sj.bdj.2017.560

Br Dent J

Nature Publishing Group

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# Letters to the editor

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## OMFS

## Notation confusion

Sir, the recent article by Cullingham *et al.*<sup>1</sup> is another reminder to dentists about what should be a 'never' event in the surgical context.

Having worked in both practice and hospitals for over 40 years I can confirm that there is a potential problem that the wrong tooth may be extracted, and I feel that this potential is on the increase.

There is an increase in the number of cases being referred (from a 'treatment decision maker' to an operator), there are several differing tooth notation schemes, and often a wish by the referrer to explain their decision and in which they mention other teeth, all of which factors can cause miscommunication and confusion particularly in orthodontic cases and where gross pathology is not obviously visible.

I have become convinced that any communication must be simple and obvious ideally: please extract eg, Upper Right 5 and c; Upper Left 3 and 6 etc. The ADI two figure system has more potential to cause confusion and error and in my opinion should be banned. Also the word 'uncover' should be used rather than 'expose' as the latter has been confused with 'extract'. Where there are only two molar teeth present the anterior one should always be 6, and the distal one 8, hence reducing the risk of wrong extraction error.

M. V. B. Nelson, by email

1. Cullingham P, Saksena A, Pemberton M N. Patient safety: reducing the risk of wrong tooth extraction. *Br Dent J* 2017; **222**: 759-763.

DOI: 10.1038/sj.bdj.2017.559

## Orienting digital radiographs

Sir, a recent article in the *BDJ* relating to wrong site surgery<sup>1</sup> correctly highlighted some of the risks. However, it was surprising that little reference was made to the risk from incorrect orientation of digital intra oral

radiographs in the surgery when indirect X-ray sensors are employed.

Processing errors which can occur when converting conventional film radiographs, as part of a referral process, into digital copies using a scanner have been highlighted previously.<sup>2</sup> Things have moved on and a large number of practices are now employing digital systems to create electronic images, especially for intra oral radiographs.

Although there is a capacity within the software for basic manipulation – to rotate, invert, correct a mirror image by the diagnostician and indeed a requirement for every dentist to report on the radiograph, we feel that errors in orientation can occur when there are no visual clues – decayed, missing or filled teeth.

There does not appear to be consistent agreement among dental schools or practitioners as to where the marker should be placed when taking periapical or bitewing radiographs. Unlike conventional radiographs, an image is produced even if the film is placed back to front in relation to the X-ray tube. In processing, in many of the readers the film can only be inserted vertically, requiring reorientation of the image, often by the operator before it is saved on the screen.

There is a potential for errors to occur, especially in multi-surgery practices, when the prescribing dentist is not the operator and does not process the radiograph. As was highlighted in the article errors can occur when the clinician performing the treatment is not the one who constructed the treatment plan and where, in a busy practice, there is a delay between the taking and viewing of the radiograph.

To illustrate the point, the writer has seen an example where records refer to the intention to remove an upper right eight and where the image on the screen is of an upper left eight. If the patient's symptoms have subsided, how easy it would be for a locum dentist to remove the wrong tooth. On another occasion, a radiograph

was taken on a nine-year-old following trauma and it was very difficult to ascertain whether the radiograph of the two central incisors was correctly orientated. It is envisaged that many other clinicians may have had similar confusions in orienting digital radiographs.

If guidelines were in place so that there was a consistent approach by all IRMER practitioners to the placement of the identifier on the film when taking, processing and reading the radiograph, the margins of error would be considerably reduced.

K. Ali, P. Ward, Plymouth

1. Cullingham P, Saksena A, Pemberton M N. Patient safety: Reducing the risk of wrong tooth extraction. *Br Dent J* 2017; **222**: 759-762.
2. Smithard E, Coupland M. Processing errors. *Br Dent J* 2012; **212**: 153.

DOI: 10.1038/sj.bdj.2017.560

## Burden to A&E

Sir, working within oral and maxillofacial surgery (OMFS), we frequently manage severe acute dental infections which present through A&E. These can be a life-threatening condition and require urgent hospital admission and surgical intervention. But what about the less severe cervicofacial infections?

We recently completed two local audits on the presentation of these patients to OMFS units in Leeds and Liverpool. Around 50–60% of patients who attended A&E required hospital admission, however, half did not and had arrived as a first port of call for emergency dental treatment. This has the potential to pressurise an already hugely burdened health service when acute dental treatment could be provided in a primary care setting.

Of the patients who did access primary care dental services with odontogenic infections, the mainstay of treatment provided was oral antibiotics alone. This treatment contradicts guidance produced by the Faculty of General Dental Practitioners UK and the Scottish Clinical Effectiveness Programme who